IN THE CLAIMS

Please cancel Claims 16 and 17 without prejudice or disclaimer.

Claims 1-11 (cancelled).

Claim 12 (previously presented): A preamplifier, comprising:

a common mode generator;

an H-bridge circuit;

a current mirror coupled to the common mode generator and to the H-bridge circuit;

an overshoot system coupled to the current mirror and the H-bridge circuit;

a first write head connection node adapted to produce a first write signal, wherein the first write head connection node is coupled to the H-bridge circuit; and

a second write head connection node adapted to produce a second write signal, wherein the second write head connection node is coupled to the H-bridge circuit;

wherein the common mode generator is adapted to provide current;

wherein the current is adapted to establish a voltage across the first write head connection node and the second write head connection node;

wherein the voltage is adapted to be pulled toward a first polarity based on the first write signal and toward a second polarity based on the second write signal; and

wherein the voltage pulled toward the first polarity and the voltage pulled toward the second polarity are substantially centered about a common mode voltage,

a first current source coupled to the common mode generator,

wherein the first current source supplies current to the current mirror when the first current source is at a maximum level.

Claim 13 (previously presented): A preamplifier, comprising:

a common mode generator;

an H-bridge circuit;

a current mirror coupled to the common mode generator and to the H-bridge circuit;

an overshoot system coupled to the current mirror and the H-bridge circuit;

a first write head connection node adapted to produce a first write signal, wherein the first write head connection node is coupled to the H-bridge circuit; and

a second write head connection node adapted to produce a second write signal, wherein the second write head connection node is coupled to the H-bridge circuit;

wherein the common mode generator is adapted to provide current;

wherein the current is adapted to establish a voltage across the first write head connection node and the second write head connection node;

wherein the voltage is adapted to be pulled toward a first polarity based on the first write signal and toward a second polarity based on the second write signal; and

wherein the voltage pulled toward the first polarity and the voltage pulled toward the second polarity are substantially centered about a common mode voltage,

a first current source coupled to the common mode generator,

wherein the first current source supplies current to the common mode generator when the first current source is not at a maximum level.

Claim 14 (original): The preamplifier of claim 13, wherein the current is supplied substantially equally to the first write head connection node and to the second write head connection node.

Claim 15 (original): The preamplifier of claim 14, wherein the common mode voltage remains substantially constant when the current is supplied substantially equally to the first write head connection node and to the second write head connection node.

Claims 16 and 17 (cancelled).

Claim 18 (previously presented): A preamplifier, comprising:

a common mode generator;

an H-bridge circuit;

a current mirror coupled to the common mode generator and to the H-bridge circuit;

an overshoot system coupled to the current mirror and the H-bridge circuit;

a first write head connection node adapted to produce a first write signal, wherein the first write head connection node is coupled to the H-bridge circuit; and

a second write head connection node adapted to produce a second write signal, wherein the second write head connection node is coupled to the H-bridge circuit;

wherein the common mode generator is adapted to provide current;

wherein the current is adapted to establish a voltage across the first write head connection node and the second write head connection node;

wherein the voltage is adapted to be pulled toward a first polarity based on the first write signal and toward a second polarity based on the second write signal; and

wherein the voltage pulled toward the first polarity and the voltage pulled toward the second polarity are substantially centered about a common mode voltage,

a first current source coupled to the common mode generator,

wherein the first current source is programmable.

Claim 19 (previously presented): A preamplifier, comprising:

a common mode generator;

an H-bridge circuit;

a current mirror coupled to the common mode generator and to the H-bridge circuit;

an overshoot system coupled to the current mirror and the H-bridge circuit;

a first write head connection node adapted to produce a first write signal, wherein the first write head connection node is coupled to the H-bridge circuit; and

a second write head connection node adapted to produce a second write signal, wherein the second write head connection node is coupled to the H-bridge circuit;

wherein the common mode generator is adapted to provide current;

wherein the current is adapted to establish a voltage across the first write head connection node and the second write head connection node;

wherein the voltage is adapted to be pulled toward a first polarity based on the first write signal and toward a second polarity based on the second write signal; and

wherein the voltage pulled toward the first polarity and the voltage pulled toward the second polarity are substantially centered about a common mode voltage,

a first current source coupled to the common mode generator,

further comprising a second current source coupled to the overshoot system.

Claim 20 (original): The preamplifier of claim 19, wherein the overshoot system supplies current to the first write head connection node and to the second write head connection node.

Claim 21 (currently amended): A preamplifier, comprising:

a common mode generator;

an H-bridge circuit;

a current mirror coupled to the common mode generator and to the H-bridge circuit;

an overshoot system coupled to the current mirror and the H-bridge circuit;

a first write head connection node adapted to produce a first write signal, wherein the first write head connection node is coupled to the H-bridge circuit; and

a second write head connection node adapted to produce a second write signal, wherein the second write head connection node is coupled to the H-bridge circuit;

wherein the common mode generator is adapted to provide current;

wherein the current is adapted to establish a voltage across the first write head connection node and the second write head connection node;

wherein the voltage is adapted to be pulled toward a first polarity based on the first write signal and toward a second polarity based on the second write signal; and

wherein the voltage pulled toward the first polarity and the voltage pulled toward the second polarity are substantially centered about a common mode voltage,

a first current source coupled to the common mode generator,

~~The preamplifier of claim 19,~~ wherein at least a portion of the common mode generator is off for a period of time when at least a portion of the overshoot system is on.

Claim 22 (original): The preamplifier of claim 21, wherein one of the following voltages from a group comprising of: the voltage pulled toward the first polarity, and the voltage pulled toward the second polarity is pulled in one

of a following direction from a group comprising of: higher, and lower, from the substantially centered common mode voltage.

Claim 23 (currently amended): The preamplifier of claim 12 ~~11~~, wherein the first write signal and the second write signal are received by a write head external to the preamplifier via an interconnect coupled between the preamplifier and the write head.

Claims 24-34 (cancelled).